SEQUENCE LISTING

<110> Shionogi & Co., Ltd

<120> Composition for promoting passive extension of bladder smooth muscle

<130> S0042PCT

<140>

<141>

<150> JP P1999-177549

<151> 1999-06-23

<160> 6

<170> PatentIn Ver. 2.0

<210> 1

<211> 1457

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (165).. (719)

<220>

<221> mat peptide

<222> (447).. (602)

<400> 1

ggcacgagct ggatagaaca gctcaagcct tgccacttcg ggcttctcac tgcagctggg 60

cttggacttc ggagttttgc cattgccagt gggacgtctg agactttctc cttcaagtac 120

ttggcagatc actctcttag cagggtctgc gcttcgcagc cggg atg aag ctg gtt 176 Met Lys Leu Val

tcc	gtc	gcc	ctg	atg	tac	ctg	ggt	tcg	ctc	gcc	ttc	cta	ggc	gct	gac	224
Ser	Val	Ala	Leu	Met	Tyr	Leu	Gly	Ser	Leu	Ala	Phe	Leu	Gly	Ala	Asp	
-90					-85			•		-80					-75	
acc	gc t	cgg	ttg	gat	gtc	gcg	tcg	gag	ttt	cga	aag	aag	tgg	aat	aag	272
Thr	Ala	Arg	Leu	Asp	Val	Ala	Ser	Glu	Phe	Arg	Lys	Lys	Trp	Asn	Lys	
				-70					-65	٠				-60		
									,							
tgg	gc t	ctg	agt	cgt	ggg	aag	agg	gaa	ctg	cgg	atg	tcc	agc	agc	tac	320
Trp	Ala	Leu	Ser	Arg	Gly	Lys	Arg	Glu	Leu	Arg	Met	Ser	Ser	Ser	Tyr	•
			-55					-50	*				-45			
							*									
ccc	acc	ggg	ctc	gc t	gac	gtg	aag	gcc	ggg	cct	gcc	cag	acc	ctt	att	368
Pro	Thr	Gly	Leu	Ala	Asp	Val	Lys	Ala	Gly	Pro	Ala	Gln	Thr	Leu	Ile	
		-40			-		-35					-30				
cgg	ccc	cag	gac	atg	aag	ggt	gcc	tct	cga	agc	ccc	gaa	gac	agc	agt	416
Arg	Pro	Gln	Asp	Met	Lys	Gly	Ala	Ser	Arg	Ser	Pro	Glu	Asp	Ser	Ser	
	-25					-20					-15					
ccg	gat	gcc	gcc	cgc	atc	cga	gtc	aag	cgc	tac	cgc	cag	agc	atg	aac	464
Pro	Asp	Ala	Ala	Arg	Ile	Arg	Val	Lys	Arg	Tyr	Arg	Gln	Ser	Met	Asn	
-10					-5				-1	1				5		
aac	ttc	cag	ggc	ctc	cgg	agc	ttt	ggc	tgc	cgc	ttc	ggg	acg	tgc	acg	512
Asn	Phe	Gln	Gly	Leu	Arg	Ser	Phe	Gly	Cys	Arg	Phe	Gly	Thr	Cys	Thr	
		•	10	١				15					20	١.		
gtg	cag	aag	ctg	gca	cac	cag	atc	tac	cag	ttc	aca	gat	aag	gac	aag	560
Val	Gln	Lys	Leu	Ala	His	Gln	Ile	Tyr	Gln	Phe	Thr	Asp	Lys	Asp	Lys	
		25	!			•	30					35				
											•	• •				
gac	aac	gto	gco	ccc	agg	ago	aag	ato	agc	ccc	cag	ggc	tac	ggc	cgc	608
Asp	Asn	Val	Ala	Pro	Arg	Ser	Lys	Ile	Ser	Pro	Gln	Gly	Tyr	Gly	Arg	
	40	ı				45	,				50)				

cgg	cgc	cgg	cgc	tcc	ctg	ccc	gag	gcc	ggc	ccg	ggt	cgg	ac t	ctg	gtg	656
Arg	Arg	Arg	Arg	Ser	Leu	Pro	Glu	Ala	Gly	Pro	Gly	Arg	Thr	Leu	Val	
55					60					65					70	

tct tct aag cca caa gca cac ggg gct cca gcc ccc ccg agt gga agt 704
Ser Ser Lys Pro Gln Ala His Gly Ala Pro Ala Pro Pro Ser Gly Ser
75 80 85

gct ccc cac ttt ctt taggatttag gcgcccatgg tacaaggaat agtcgcgcaa 759 Ala Pro His Phe Leu

90

gacateceget ggigectece gggacgaagg acticeegag eggigigggg aceggetet 819
gacagecetg eggagaecet gagteegga ggeacegiee ggeggegage tetggettig 879
caagggeece teettetggg ggettegett eettageett geteaggige aagtgeecea 939
gggggegggg tgeagaagaa teegagigit tgeeaggett aaggagagga gaaactgaga 999
aatgaatget gagaceeceg gageaggggt etgageecaea geegtgeteg eecacaaact 1059
gatiteteae ggegtgieae eecaceaggg egeaageete actattaett gaactiteea 1119
aaacetaaag aggaaaagtg eaatgegigt tgiacataea gaggtaacta teaatattta 1179
agtitigtige tgicaagatt tittitigtaa etteaaatat agagatatti titgiaegita 1239
tatatigiat taagggeatt ttaaaageaa ttatattgie eteecetatt ttaagaegig 1299
aatgieteag egaggigtaa agtigitege egegtggaat gtgagtigt titgigeat 1359
gaaagagaaa gactgattae eteetgigtg gaagaaggaa acacegagie tetgiataat 1419
etatttacat aaaatgggtg atatgegaac ageaaace 1457

⟨210⟩ 2 **<211> 185** <212> PRT <213 Homo sapiens **<400> 2** Met Lys Leu Val Ser Val Ala Leu Met Tyr Leu Gly Ser Leu Ala Phe -85-90 Leu Gly Ala Asp Thr Ala Arg Leu Asp Val Ala Ser Glu Phe Arg Lys -75 -70-65 Lys Trp Asn Lys Trp Ala Leu Ser Arg Gly Lys Arg Glu Leu Arg Met -50 -55 Ser Ser Ser Tyr Pro Thr Gly Leu Ala Asp Val Lys Ala Gly Pro Ala -35-45Gln Thr Leu Ile Arg Pro Gln Asp Met Lys Gly Ala Ser Arg Ser Pro -20-15-30-25Glu Asp Ser Ser Pro Asp Ala Ala Arg Ile Arg Val Lys Arg Tyr Arg -5 -10 Gln Ser Met Asn Asn Phe Gln Gly Leu Arg Ser Phe Gly Cys Arg Phe 10 15 5 Gly Thr Cys Thr Val Gln Lys Leu Ala His Gln Ile Tyr Gln Phe Thr 25 30 20 Asp Lys Asp Lys Asp Asn Val Ala Pro Arg Ser Lys Ile Ser Pro Gln 50 45 35 40 Gly Tyr Gly Arg Arg Arg Arg Ser Leu Pro Glu Ala Gly Pro Gly

60

55

65

Arg Thr Leu Val Ser Ser Lys Pro Gln Ala His Gly Ala Pro Ala Pro 70 75 80

Pro Ser Gly Ser Ala Pro His Phe Leu ·

85

90

<210> 3

<211> 1493

<212> DNA

<213> Sus scrofa

<220>

<221> CDS

<222> (148).. (711)

<220>

<221> mat peptide

<222> (430).. (585)

⟨400⟩ 3

gcggaacagc tcgagccttg ccacctctag tttcttacca cagcttggac gtcggggttt 60

tgccactgcc agagggacgt ctcagacttc atcttcccaa atcttggcag atcacccct 120

tagcagggtc tgcacatctc agccggg atg aag ctg gtt ccc gta gcc ctc atg 174 Met Lys Leu Val Pro Val Ala Leu Met

-90

tac ctg ggc tcg ctc gcc ttc ctg ggc gct gac aca gct cgg ctc gac 222

Tyr Leu Gly Ser Leu Ala Phe Leu Gly Ala Asp Thr Ala Arg Leu Asp

-85 -80 -75 -70

gtg gcg gca gag ttc cga aag aaa tgg aat aag tgg gct cta agt cgt 270 Val Ala Ala Glu Phe Arg Lys Lys Trp Asn Lys Trp Ala Leu Ser Arg -65

gga	aaa	aga	gaa	ctt	cgg	ctg	tcc	agc	agc	tac	ccc	acc	ggg	atc	gcc	318
Gly	Lys	Arg	Glu	Leu	Arg	Leu	Ser	Ser	Ser	Tyr	Pro	Thr	Gly	Ile	Ala	
			-50					-45					-40			
gac	ttg	aag	gcc	ggg	cct	gcc	cag	act	gtc	att	cgg	ccc	cag	gat	gtg	366
Asp	Leu	Lys	Ala	Gly	Pro	Ala	Gln	Thr	Val	Ile	Arg	Pro	Gln	Asp	Val	
		-35					-30					-25				
aag	ggc	tcc	tct	cgc	agc	ccc	cag	gcc	agc	att	ccg	gat	gca	gcc	cgc	414
								Ala								
•	-20					-15					-10	_				4
						-										
atc	cga	gtc	aag	cgc	tac	CEC	cag	agt	atg	aac	aac	ttc	cag	ggc	ctg	462
						-		Ser								
-5			~, 0	-1	1	0			5					10		
ŭ				•	•			٠.						•		
CPP	agr	ttc	øør •	tøt	cgc	111	ggg	acg	tgc	acc	gtg	cag	ลลซ	ctg	gcg	510
								Thr								010
6	501		15	0 3 3	M16				0,5	111,1	,	o i i	25	Dou		
•			10				•	20					20			
cac	രാഗ	atc	tac	car	ttc	200	gar	aaa	o a c	220	σar	gge	σtr	grr	ccc	558
								Lys								000
1113	UIII	30	TYI	GIII	THE	1111	35	ц	пор	цуз	пор	40	, 41	Mid	110	
		30					50					10				
caa	9.000	220	atc	200	000	cac	aac	tac	gge	cac	roo	cac	ന മ	cac	tet	606
								Tyr								000
,		r à 2	116	361	rio		dly	1 9 1	uly	пιξ	55	шЕ	пιξ	мі	561	
	45					50					00					
a t ==		~~~						0 a t	a t a	200	taa	200	~ · ·	000	000	654
								act								004
	Pro	GIU	Ala	261		GIY	Arg	Thr	Leu		261	GIII	GIU	rio		
60					65					70					75	
				• .			•		. ,			_ 4			ـ الم	
gcg	cac	ggg	gcc	ccg	gcc			gcg							CIC	702

Phe Arg Ile

ttt agg att taggcgccta ctgtggcagc agcgaacagt cgcgcatgca

751

teatgeegge getteetggg geggggget teeeggagee gageecetea geggetgggg 811 cccgggcaga gacagcattg agagaccgag agtccgggag gcacagacca gcggcgagcc 871 ctgcattttc aggaacccgt cctgcttgga ggcagtgttc tcttcggctt aatccagccc 931 gggtcccgg gtgggggtgg agggtgcaga ggaatccaaa ggagtgtcat ctgccaggct 991 cacggagagg agaaactgcg aagtaaatgc ttagaccccc aggggcaagg gtctgagcca 1051 ctgccgtgcc gcccacaaac tgatttctga aggggaataa ccccaacagg gcgcaagcct 1111 cactattact tgaactitcc aaaacctaga gaggaaaagt gcaatgtatg tigtatataa 1171 agaggtaact atcaatattt aagtitgtig cigicaagat tittititigt aacticaaat 1231 atagagatat titigtacgi tatatatigi attaagggca tittaaaaca attgtatigi 1291 tcccctcccc tctattttaa tatgtgaatg tctcagcgag gtgtaacatt gtttgctgcg 1351 cgaaatgtga gagtgtgtgt gtgtgtgtgc gtgaaagaga gtctggatgc ctcttgggga 1411 agaagaaaac accatatctg tataatctat ttacataaaa tgggtgatat gcgaagtagc 1471 1493

<210> 4

ļ.

TŲ.

t C

<211> 188

<212> PRT

<213> Sus scrofa

aaaccaataa actgtctcaa tg

<400)> 4														
Met	Lys	Leu	Val	Pro -90	Val	Ala	Leu	Met	Tyr -85	Leu	Gly	Ser	Leu	Ala -80	Phe
Leu	Gly	Ala	Asp -75	Thr	Ala	Arg	Leu	Asp -70	Val	Ala	Ala	Glu	Phe -65	Arg	Lys
Lys	Trp	Asn -60	Lys	Trp	Ala	Leu	Ser -55	Arg	Gly	Lys	Arg	Glu -50	Leu	Arg	Leu
Ser	Ser -45	Ser	Tyr	Pro	Thr	Gly -40	He	Ala	Asp	Leu	Lys -35	Ala	Gly	Pro	Ala
Gln -30	Thr	Val	I l <u>e</u>	Arg	Pro -25	Gln	Asp	Val	Lys	Gly -20	Ser	Ser	Arg	Ser	Pro -15
Gln	Ala	Ser		Pro	Asp	Ala	Ala	Arg	Ile -5	Arg	Val	Lys	Arg	Tyr 1	Arg
Gln	Ser	Me t	Asn	Asn	Phe	Gln	Gly 10	Leu	Arg	Ser	Phe	Gly 15	Cys	Arg	Phe
Gly	Thr 20	Cys	Thr	Val	Gln	Lys 25	. Leu	Ala	His	Gln	Ile 30	Tyr	Gln	Phe	Thr
Asp 35	Lys	Asp	Lys	Asp	Gly 40	Val	Ala	Pro	Arg	Ser 45	Lys	Ile	Ser	Pro	Gln 50
Gly	Tyr	Gly	Arg	Arg 55	Arg	Arg	Arg	Ser	Leu 60	Pro	Glu	Ala	Ser	Leu 65	Gly
Arg	Thr	Leu	Arg 70		Gln	Glu	Pro	Gln 75	Ala	His	Gly	Ala	Pro 80	Ala	Ser

Pro Ala His Gln Val Leu Ala Thr Leu Phe Arg Ile

<210> 5

<211> 1376

<212> DNA

<213> Rattus norvegicus

<220>

<221> CDS

<222> (154).. (708)

<220>

<221> mat peptide

<222> (433).. (582)

<400> 5

tccagcettt accgctcctg gtttctcggc ttctcatcgc agtcagtctt ggactttgcg 60

ggttttgccg ctgtcagaag gacgtctcgg actttctgct tcaagtgctt gacaactcac 120

cctttcagca gggtatcgga gcatcgctac aga atg aag ctg gtt tcc atc gcc 174 Met Lys Leu Val Ser Ile Ala

-90

ctg atg tta ttg ggt tcg ctc gcc gtt ctc ggc gcg gac acc gca cgg 222

Leu Met Leu Leu Gly Ser Leu Ala Val Leu Gly Ala Asp Thr Ala Arg

-85 -80 -75

ctc gac act tcc tcg cag ttc cga aag aag tgg aat aag tgg gcg cta 270 Leu Asp Thr Ser Ser Gln Phe Arg Lys Lys Trp Asn Lys Trp Ala Leu -70 -65 -60 -55

agt cgt ggg aag agg gaa cta caa gcg tcc agc agc tac cct acg ggg 318 Ser Arg Gly Lys Arg Glu Leu Gln Ala Ser Ser Ser Tyr Pro Thr Gly -50 -45 -40

ctc	gtt	gat	gag	aag	aca	gtc	ccg	acc	cag	act	ctt	ggg	ctc	cag	gac	366
Leu	Val	Asp	Glu	Lys	Thr	Val	Pro	Thr	Gln	Thr	Leu	Gly	Leu	Gln	Asp	
			-35					-30		•			-25			
aag	cag	agc	acg	tct	agc	acc	cca	caa	gcc	agc	act	cag	agc	aca	gcc	414
	Gln															
-,-	,	-20					-15		•			-10				
cac	att	cga	gtc	aaa	cgc	tac	cgc	cag	agc	atg	aac	cag	ggg	tcc	cgc	462
	Ile															
	-5		,	2,0	-1	1				5					10	
	Ū				•	•								•		
agr	act	gga	tøc	cgc	111	ggg	асс	tgc	aca	atg	cag	aaa	ctg	gct	cac	510
	Thr															
501	1111	Uly	0,3	15	1110	01,	• • • • •	•,-	20			•-		25		•
	٠.			10												
നമ ന	atc	tac	റമന	+++	ara	gac	ลลล	gac	ลลฮ	gac	ggc	atg	gcc	ccc	aga	558
	lle															
OIII	110	1 3 1	30		1111	nop	2,0	35			,		40			
			00					00								
220	220	ato	200	cct	caa	ggr	tat	ggr	cgc	cgg	cgc	cgg	cgt	tcc	ctg	606
	Lys															
ASII	. Lys	45		110	0111	diy	50		**** 6	• • • • •		55				
		70					00									
cca	_	otr	ctc	- നമ	gee	. CBB	act	gtg	gag	tcc	tcc	cag	gag	cag	aca	654
	Glu															
110	60		LCu	1116	, /11 u	65		,	0		70					
	00					00	,									
C a C	tra	gr t	. 663	ነ ወሶሳ	ter		7 909	r car	сая	gan	ato	tcc	aga	gto	tct	702
															Ser	
75		WIG		, 110	80		, ,,,,,		. 511	85		501		,	90	
10	,				O.	,						•			- •	
9.00	g tta	tar	aatar	aaa	taar	9009	ett o	72262	gtco	g gr	gagt	atco	cat	tgga	gcc	758
	z Leu		56 • B	666	1881	agu	8	,440	·• • • 6	, o	.0-0	_,,,,				
71 L	1451															

⟨210⟩ 6

<211> 185

<212> PRT

<213 Rattus norvegicus

<400> 6

Met Lys Leu Val Ser Ile Ala Leu Met Leu Leu Gly Ser Leu Ala Val -90 -85 -80

Leu Gly Ala Asp Thr Ala Arg Leu Asp Thr Ser Ser Gln Phe Arg Lys
-75
-70
-65

Lys Trp Asn Lys Trp Ala Leu Ser Arg Gly Lys Arg Glu Leu Gln Ala

	00					00				•	00				
Ser -45	Ser	Ser	Tyr	Pro	Thr -40	Gly	Leu	Val	Asp	Glu -35	Lys	Thr	Val	Pro	Th:
Gln	Thr	Leu	Gly	Leu -25	Gln	Asp	Lys	Gln	Ser -20	Thr	Ser	Ser		Pro -15	Gli
Ala	Ser	Thr	Gln -10	Ser	Thr	Ala	His	Ile -5	Arg	Val	Lys	Arg -1	Tyr 1	Arg	Gli
Ser	Met 5	Asn	Gln	Gly	Ser	Arg 10	Ser	Thr	Gly	Cys	Arg 15	Phe	Gly	Thr	Cys
Thr 20	Met	Gln	Lys	Leu	Ala 25	His	Gln	Ile	Tyr	Gln 30	Phe	Thr	Asp	Lys	Ası 3
Lys	Asp	Gly	Met	Ala 40	Pro	Arg	Asn	Lys	Ile 45	Ser	Pro	Gln	Gly	Tyr 50	Gl

Arg Arg Arg Arg Ser Leu Pro Glu Val Leu Arg Ala Arg Thr Val 55 60 65

Glu Ser Ser Gln Glu Gln Thr His Ser Ala Pro Ala Ser Pro Ala His
70 75 80

Gln Asp Ile Ser Arg Val Ser Arg Leu 85 90